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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,147	12/04/2003	Tetsuji Omura	YKI-0142	6736
23413	7590	08/09/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			COLON, GERMAN	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/728,147

Applicant(s)

OMURA ET AL.

Examiner

German Colón

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/4/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Otsuki et al. (US 6,737,176).

Regarding claims 1 and 7, Otsuki discloses a display apparatus (see Fig. 1) having pixels in a matrix, the apparatus comprising:

an element substrate **10** on which a luminous element is formed for each of the pixels;

a sealing substrate **24** on which a protrusion is formed in a surrounding area thereof, the protrusion being adhered to the periphery of said element substrate so as to seal an upper space over said element substrate;

a desiccant **42** fixed on an internal surface of the sealing substrate opposed to the element substrate, wherein

said desiccant consists of an adhesive made of resin (see at least Col. 4, lines 10-12) and moisture absorbent grains dispersedly mixed into the adhesive, and

the size of said moisture absorbent grains is equal to or smaller than 10  $\mu\text{m}$  (see Col. 4, lines 28-30).

Regarding claims 2 and 8, Otsuki discloses the moisture absorbent grains being CaO grains (see Col. 4, line 18).

Regarding claims 3-4 and 9-10, Otsuki discloses said resin being an acrylic resin or an epoxy resin (see Col. 4, lines 33-34).

Regarding claim 5 and 11, Otsuki discloses the size of the moisture absorbent grains being between 0.1  $\mu\text{m}$  and 10  $\mu\text{m}$  (see Col. 4, lines 28-30).

3. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (JP 2000-173766).

Referring to claims 1 and 7, Yamada discloses a display apparatus (see Figs. 3-8) having pixels in a matrix, the apparatus comprising:

an element substrate **1** on which a luminous element is formed for each of the pixels;

a sealing substrate **22** on which a protrusion is formed in a surrounding area thereof (see paragraph [0073]), the protrusion being adhered to the periphery of said element substrate so as to seal an upper space over said element substrate;

a desiccant **33** fixed on an internal surface of the sealing substrate opposed to the element substrate, wherein

said desiccant consists of an adhesive made of resin (see paragraphs [0065] and [0067]) and moisture absorbent grains dispersedly mixed into the adhesive, and

the size of said moisture absorbent grains is equal to or smaller than 10  $\mu\text{m}$  (see paragraph [0067] on Col. 13). The Examiner notes that while Yamada discloses when desiccant **33** is used, the sealing substrate having a protrusion is not a preferred embodiment, the reference

teaches that any shape, including one with a protrusion, can exemplified the sealing substrate 22 (see paragraph [0073]).

Referring to claims 2 and 8, Yamada discloses the moisture absorbent grains being CaO grains (see paragraph [0067] on Col. 13).

Referring to claims 3-4 and 9-10, Yamada discloses said resin being a UV curing resin or an epoxy resin (see paragraph [0068]).

Referring to claim 5 and 11, Yamada discloses the size of the moisture absorbent grains being between 0.1  $\mu\text{m}$  and 10  $\mu\text{m}$  (see paragraph [0067] on Col. 13).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuki et al. (US 6,737,176) in view of Hishida (US 6,861,802).

In regards to claim 6, Otsuki discloses the claimed invention except for the limitation of the desiccant being formed in the shape of a spiral on a surface of the sealing substrate.

However, in the same field of endeavor, Hishida discloses a desiccant formed in the shape of a spiral and teaches said embodiment to provide a moisture absorbent having a large surface area disposed in a minimum area (see Col. 2, lines 23-25). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the

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desiccant in the shape of a spiral in order to obtain a moisture absorbent having a large surface area disposed in a minimum area. Further, providing the desiccant in the shape of a spiral would have involved a mere change in the shape of a component, and accordingly, it has been held to be within the level of ordinary skill in the art.

### ***Prior Art of Record***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Boronson et al. (US 6,740,145) and Taylor (US 4,013,566) disclose a desiccant including a moisture absorbent grain mixed into a resin.

### ***Contact Information***

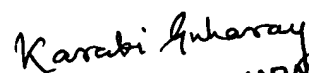
Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
gc

  
KARABI GUHARAY  
PRIMARY EXAMINER